

Sanctuary Education Panel (SEP) Meeting Minutes

Thursday, March 21, 2013

Location: MBA, Bing Boardroom
Time: 3:00 – 5:00 PM

Attendees: Simona Bartl-MLML, Lisa Uttal-MBNMS, Pat Clark Gray-State Parks, Rita Bell-MBA, Dorris Welch-Sanctuary Cruises
Via Conference Call: Annie Frankel-CA CC, Virginia Guhin-ESNRR

SIMoN - Chad King, MBNMS presenter

- 2) Chad presented a thorough presentation of the SIMoN website resources and potential ways to use them for educators. Chad is interested in learning best ways to develop this for best use by educators. Steve Lonhart and Chad are both working on SIMoN with a few more part-time staff. No extra funding now - Packard funds ran out a long time ago.
- 3) How are we using SIMoN?
 - a) Dorris has used SIMoN as a resource for educational program/materials/exhibits development.
 - b) Teachers are getting information on different species - this is mostly how it has been used.
 - c) Sanctuary Exploration Center has been utilizing it for docents/volunteers as an educational resource.
- 4) Background:
 - a) Created in 2002 to collect and centralize metadata level information about monitoring projects within MBNMS.
 - b) In recent years has evolved into providing additional resources at minimal cost for the marine resources community. No projects are funded anymore.
 - c) They no longer rescue historical data sets. This was an initial lofty role.
- 5) Demonstration of the website:
 - a) Url: sanctuarysimon.org
 - b) Webpage was reformatted a year ago. Right side habitats and issues. Left side: what's new
 - c) 3 sanctuaries included; MBNMS has 95% info, along with Cordell and Gulf of the Farallones
- 6) Monitoring projects - 130 projects listed. This is the main reason for this site historically. They are the metadata warehouse. You need to go to the PI of the actual project to get the actual data.
 - a) Question was raised regarding locating projects/data by actual location. Go to "interactive maps" sections and click on the dot. It will list projects displayed by icons. This is linked to a full page with details on the project.
 - b) MPA monitoring map is a good example of an interactive map to view. Not all of them are updated.
- 7) Species database - include 130+ species which were selected for the "charisma"
 - a) This is used heavily. Photo database is #1; species database is #2 for hits.
 - b) Discussion re: MBAQ website of species descriptions, MBNMS site and MLML shark species site. Can they all be coordinated somehow?
 - c) Geotagging- Chad tags lat/long of all the photos they take, so it comes up on Google maps.
 - d) Lisa noted that it is very easy to download a high-resolution image and use for noncommercial purposes.
- 8) SeaPhoto app for iPhone/iPad
 - a) This is portable version of the photo database. App is only 4 mgs

- b) Not all the images are on it. Images need to be downloaded on command, so you must have wifi to obtain the images first time around.
- c) Once you have downloaded the image you selected, it is on your mobile device.
- 1) Potential for creating subsets of data that is targeted so specific questions can be posed and this utilized for educational programs. (i.e. "data base light")
 - a) Potential existing data layers:
 - i) MBNMS sponsored
 - ii) Water quality
 - iii) Sub tidal kelp forest data - PISCO, BSNC
 - iv) Limpets
 - v) Beachcombers
 - vi) Shelf image and characterization display.
 - b) Ex. Water quality data
 - i) Snapshot day
 - ii) This shows a map of where people have monitored
 - iii) The data collected included data for each site. Students could pull up and do comparisons. I.e. Agricultural vs. non-agricultural sites.
 - c) Ex. PISCO
 - i) Intertidal and sub tidal site monitoring - same protocol across sites entire west coast from Mexico to Alaska
 - ii) Fish, inverts and algae #s, Also fish length
 - iii) PISCO has an interactive map but you can't download the entire data set.
 - iv) These are quantitative surveys, so you can compare numbers from site to site.
 - v) Piscoweb.org has an interactive map for central coast region
 - d) Ex. Big Sur Nearshore Characterization (BSNC)
 - i) To look at Caltrans dumping areas
 - ii) This is qualitative
 - iii) Collect species richness (numbers) of fishes and invertebrates at each site from deep to shallow.
 - iv) They look at areas that are subject to frequent landslide or Caltrans debris dumping sites. How does the diversity compare to non-landslide/debris dump areas?
 - v) They have done hundreds of dives at 74 sites.
 - vi) Landslide areas dominated by gravel, sand, low-lying rocks with algae - very different species composition.
 - vii) This is a stark comparison to the clear water, large boulders species rich kelp forest in non-slide areas.
 - e) Ex. BeachCombers - This is a Monterey Bay effort since 1997.
 - i) Has shown mortality events of birds and mammals. Links to red tide is a good example.
 - ii) Suggestion: have students link data to environmental events, such as red tide.
 - iii) This is a longstanding program with lots of good dead animal data.
 - iv) Now there is a lack of funding for data entry.
 - f) NOTE: State Parks requires all to have research permits to collect data.
 - g) Ex. Shelf Characterization and Image Display SCID
 - i) Developed this with CSUMB
 - ii) This shows locations within the sanctuary. Transects of ROVs or camera sleds towed behind research vessel.
 - iii) SCID has chosen best video, photos and data.
 - iv) Sep.csUMB.edu/ifame/scid/

- v) IfAME - Institute for Applied Marine Ecology at CSUMB
- 9) Chad suggests giving high school students access to GIS to work with this data set.
 - a) More suggestions from Chad included:
 - i) Student data collection
 - ii) Water quality photographs with lat/long
 - iii) Beach cast objects and organisms
 - iv) This could be useful to resource managers.
- 10) Tools
 - a) Excel
 - b) ArcGIS Explorer
 - c) Flickr, Picasa
 - d) GPS units and cameras
 - e) ArcGIS Explorer
 - i) This is a free GIS tool
 - ii) Can access any public map or GIS data
 - iii) Edit, upload your own to share
 - iv) Chad illustrated this by showing a map of SBNC sites that he created using BSNC data in a short five mins.
 - v) Much easier than Google maps or Google earth
 - vi) This allows you to lay data and information on top of maps. Make graphs, etc.
 - f) Another example:
 - i) Photos + Flickr + ArcGIS
 - ii) To create a photo story map of the sanctuary
- 11) Suggestions from SEP members?
 - a) Comments included:
 - i) Real time data not useful for teachers. Need data that has been cleaned up and prepared for a lesson activity. To prep data in a way that provides it in a way
 - ii) Water quality data would be great for Watsonville kids working on watershed issues.
 - iii) Photos placed by location on maps useful for elementary students.
 - iv) Perhaps whale strike data would also be useful.
 - v) Landslide data and diversity this can be seen readily that areas in close proximity are so different. This is a way to show implications of resource management, like case studies.
 - vi) Beachcombers - harmful algal bloom/el Niño/ oiled birds
- 12) Chad can create maps with data that would be interactive for students, but would not provide them the ability to download information.
 - a) There is a marine debris committee through Coastal Commission. Is the Sanctuary involved in this? Coast clean-up data will now be logged via this.
 - b) Lost fishing gear project over the last few years has lots of information on where fishing gear was lost and the impact.

Teacher Survey Update

- 1) Virginia has put this on Survey Monkey.
 - a) Question - is there a SEP page on the MBNMS site yet? We are a few weeks away from new Sanctuary Education site.
- 2) **ACTION ITEMS:**
 - a) Virginia will send us the survey to all present. Read over for typos/edits and take it and send edits back to Simona. Then Simona will send this to Virginia. Still to do: draft a letter

inviting teachers to take the survey; get link for new SEP webpage; get total number of addresses on SEP teacher listserv.

- b) Simona will ask us **LATER** to send this to our local teachers lists, get her numbers of teachers we have on those lists and ask teachers to respond back by email if they have received duplicate requests to take survey.

Role of SEP with SAC

- 1) Simona suggests being more proactive with SAC. An example is a current request from the Conservation Working Group to collaborate on a Pacific leatherback turtle conservation project.
 - a) The SEP members agreed to work with them. Discussion ensued.
 - b) Simona reported that turtle researcher Scott Benson gave a long report to the SAC on the CA leatherback sea turtle. Simona shared this tracking data - showing that our Monterey Bay turtles go to Indonesia. Scott indicates that we here in CA have done a really good job on protection, conservation and preventing captures by fishing gear. However, in Indonesia the turtle populations are dropping in the last two decades drastically. Our turtles are getting caught in fishing gear along the way, island introduced predators are eating the eggs and the Indonesians are taking the eggs. Will likely be gone in ten years.
 - c) The CWG wants to know if we will partner with them in a conservation effort on this.
 - d) Question on how to get resources:
 - i) Annie shared that the CC is interested in resources and looked for them when the leatherback became the state marine reptile and found none.
 - ii) Try NMFS La Jolla/turtle tracking
 - iii) Ask Scott for the PowerPoint he showed SAC.
 - iv) **ACTION: ITEM:** Lisa shared that Scott has helped messaging for Exploration Center. Lisa will share this information with Simona.
- 2) Future SEP role discussion
 - a) **ACTION ITEM:** Simona will add this item to the next SEP agenda.
 - b) Lisa shared that we should look at the Channel Islands Marine Sanctuary SEP as a potential model. They work on issues that are pertinent to the Sanctuary and the SAC and they provide education advice. They focus on topics that are issue based and have a timeline. Lisa suggests this may be the future of the MBNMS SEP. We can create a unified messaging on topical issues and try to break down the silos of different organizations working separately on the same issue and topic.
 - c) Simona shared that the leatherback issue fits that model. Since the other working group has asked us, this is timely.
- 3) **ACTION ITEM:** SEP members will pull together what leatherback information is available and we will look at what the sanctuary already has and what should be added to or messaged in a different way.

Next meetings

- 1) May 16th - SEP Exploration Center - Notetaker? – will ask at next meeting.
 - a) Then summer hiatus and restart by meeting a month after the SAC.
- 2) Sept 19th - MBARI - George M
- 3) Nov 21st – ESNRR - Notetaker?

Announcements:

- 1) MBA environmental educator's meeting tomorrow:

- a) Rita Bell is in a new group: environmental education collaborative from the SF Bay area. Their goal is to move environmental education from the “nice to have” to the “need to have”. How can we make sure our environmental education resonates from a broader audience? Message points have been put together. Tomorrow is the first listening session. They have invited 15 other environmental education type folks. How would we rewrite it from the ground up? It is a good time, as the next generation science standards and cross cutting ideas. It is important for the SEP to understand what these other groups are doing so that we don’t overlap. It would be good to work in the same direction and not at cross-purposes.
- 2) Annie: Coastal Conservancy has announced new grant: one million dollars in \$50,000 amounts for projects that enhance the publics’ ability to explore the CA coast.
 - a) <http://scc.ca.gov/>
- 3) Virginia /Elkhorn Slough- public K-12 ave. 70 kids/day
 - a) Coastal decision makers program - 4 workshops and many field days
 - b) Burrowing owl training, red-legged frog, estuarine sea otters.
- 4) Simona Bartl/MLML open house April 20 & 21st
 - a) Director interviews completed. Announcement soon.
 - b) Summer workshops will announced if grant comes through.
- 5) Pat Clark Gray/State Parks - new brochure “150 Years of CA State Parks”
 - a) Sea Studios helped fund a sea otter panel for Moss Landing State Beach.
 - b) Also two Elkhorn Slough panels will go up soon at Moss Landing SB.
 - c) A model of Whaler’s Cove may be build 4x4’ stone model at site for divers and public.
 - d) Pfeiffer Big Sur - renovation is complete. Ribbon cutting ceremony/tours in April 5th, 9-noon.
- 6) MBA - gearing up for summer teaching institutes; lots of applications. Met in Alameda last night with Nate Ivey on waste production plants within the schools. Students are collecting nurdles and sending to pelletwatch.org (shearwaters impact).
 - a) Ocean plastic pollution summit will happen again this year. Collecting data over time.
 - b) Teen Conservation Leadership program has double the applicants for summer positions. Looking for additional opportunities for these teens beyond MBAQ.

Meeting adjourned 5:15 pm.